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Guido Knobel

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EXAMINER

BODAWALA, DIMPLE N

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/519,292	Applicant(s) KNOBEL, GUIDO	
	Examiner DIMPLE N. BODAWALA	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 25-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 25-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

New Grounds of Rejections

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 25-28 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 25-28 are rejected because claims cite limitation of "...ram is configured to selectively move into and out of the mold **between a first position and a second position** for at least partially forming an outer shell from the consumable material..." is not described such a way in the disclosure of the instant application.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims **25-28** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Claims 25-28 are vague and indefinite because they are unclear what is the first and second position of water cooled ram for at least partially forming an outer shell from the material.
6. Claim 25 is vague and indefinite because it is unclear about the first and second position of displacement ram for contacting at least partially formed an outer shell from the material, while water cooled ram is in the second position.

7. Claim 25 is vague and indefinite because it is unclear how the displacement ram expelling air inclusion from the partially formed shell when the water-cooled ram is in the second position.

8. Claim 27 recites the limitation "the consumable material" in lines 8-9. There is insufficient antecedent basis for this limitation in the claim.

9. Claim 28 recites the limitation "the consumable material" in lines 8-9. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

10. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

11. **Claim 26 is rejected under 35 U.S.C. 102(b) as being anticipated by Czetli (US 3,587,132).**

12. Czetli ('132) discloses a molding apparatus for forming an article, wherein invention has wide application in the field of forming articles out of material subjected successively to different temperatures (See col.1 lines 10-12), thus, such statement indicates that the molding apparatus is **capable to use for molding consumable product**. It further teaches that the invention comprises **a female mold (22)** having a molding cavity (18) for receiving molding material; **a male mold (28)** as a ram is associated with drive means (8) is involved to move male mold(28) in selective position such as into and out of the mold (26) (See figure 2), wherein male mold comprises a **passage (47)** is associated with cooling water chamber (43) for supplying water within the internal space of the male mold (See figure 9; col.5 lines 25-28), thus, such configuration of the male die would **define a water cooled ram** as cited in claim; and further comprises **axial bore (46) for receiving tube (33)**, wherein tube having one end as **duct (34) communicate with the cavity** (See col.4 lines 33-35; figure 9), and other end as **supply source** (not labeled) (See figure 9), wherein tube is involved to flow the steam into the cavity (See col.5 lines 18-22). However, instant disclosure fails to teach or

suggest first and second positions of the water cooled ram for making outer shell, therefore, for the examination purpose examiner considering the open and closed positions of the mold as first and second position of the ram as cited in claim. It further teaches that after predetermined time the steam admitted through the tube is shut off (See col.5 lines 23-24), wherein such statement indicates that the tube (33) is associated with any suitable source by valve for shutting off and opening communication of steam. Claim 26 of the instant application cites structural limitations with the intended uses as further limitations of the subject matter, such as, “...**gas from the source communicates through the tube and into the mold for displacing an amount of consumable material, wherein the water cooled ram is in the second position**”. Intended use has been continuously held not to be germane to determining the patentability of the apparatus, *In re Finsterwalder*, 168 USPQ 530. The manner or method in which a machine is to be utilized is not germane to the issue of patentability of the machine itself, *In re Casey*, 152 USPQ 235, 238. Purpose to which apparatus is to be put and expression relating apparatus to contents thereof during the intended operation are not significant in determining patentability of an apparatus claim, *Ex parte Thibault*, 164 USPQ 666. A recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations, *Ex parte Masham*, 2 USPQ2d 1647. **Czetli (‘132)** discloses all claimed limitations as discussed above, and, thus claim is anticipated.

Claim Rejections - 35 USC § 103

13. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
14. **Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Binley (US 5,409,722) in view of Vos (US 5,102,672).**
15. **Binley (‘722)** discloses an invention related to manufacture consumable product, such as chocolate, particularly in shell form, wherein invention comprises two separable

mould surfaces, which defines a closed cavity as a mould containing consumable product, such as solid fat containing product, especially **chocolate product** (See col.2 lines 1-5). It further teaches that the invention comprises **a ram (2)** which is held **at –below 0 C** in **associated with cooling device** (See examples 1-2). It further teaches that the cooling ram (2) having **an axial bore (8)** (See figure 1). It further teaches that the ram (2) is configured to selectively move into and out of the mold in order to form shell of the consumable product (See figures 1-2). However, instant disclosure fails to teach or suggest first and second positions of the water cooled ram for making outer shell, therefore, for the examination purpose examiner considering the open and closed positions of the mold as first and second position of the ram as cited in claim. Binley ('722) further teaches that insert (3) having **an injection rod (9) is received within the axial bore (8) of the cooling ram (2)** (See col.3 lines 30-42), wherein end of rod (9) is configured to move within the axial bore (See figures 1-2), thus rod (9) would be used as **a displacement ram** as claimed.

16. Binley ('722) discloses all claimed limitations as discussed above. It further teaches that the ram is associated with cooling device in order to hold the temperature of the ram below 0 C, but fails to teach or suggest that the cooling ram is a water cooled ram as claimed.

17. Vos ('672) discloses an invention which comprises a cone-shaped mold as male shaping member having an internal space, wherein **internal space of the die including nine passageways (34) is involved to supply cooling fluid, such as water from the source of ice-water bucket or other** (See abstract).

18. It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the cooling male die or ram of **Binley ('722)** by providing cooling passage within the internal of the die, wherein passages communicating with cooling water, and, thus the male die is interiorly cooled (See

abstract) as taught by **Vos ('672)** wherein such configuration of the male die enable to manufacture the product in desired feature and configuration for marketability.

19. **Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boyhan (WO 97/49296) in view of Barger et al. (US 3,171,731).**

20. **Boyhan ('296)** discloses a molding apparatus for making a shell molded article, wherein invention comprises **a molding cavity (14) of the mould; a former plate (320) as ram** is configured to selectively move into and out of the mold (See figures 6-7), wherein such position of the ram is counted as first and second position of the ram as cited in claim. However, instant disclosure fails to teach or suggest first and second positions of the water cooled ram for making outer shell, therefore, for the examination purpose examiner considering the open and closed positions of the mold as first and second position of the ram as cited in claim. It further teaches that the ram (20,320) comprises **an internal space**, which is surrounded by **a flexible forming member (18,318)** (See figures 1-8). It further teaches that the invention is particularly suitable for molding liquid material which solidify upon cooling to ambient temperature, the apparatus may be equally employed where additional **heating or cooling means are provided in or to the mould, in connection with the forming means (18)** or otherwise (See page 10 lines 11-18), thus, such statement indicates that the internal space of the ram enable to have cooling means, but fails to teach or suggest cooling water as cited in claim.

21. **Barger et al. ('731)** discloses a cooling system for molding apparatus, wherein apparatus comprises a male shaping die (40) as ram having a relatively thin exterior wall (42) which defined a hollow chamber (44), wherein **hollow chamber received a pair of coolant delivery tube (48,50) for introducing coolant into the chamber** (See col.4 lines 15-30), wherein coolant medium could be water or air (Se col.1 lines 31-34). It further discloses coolant supplying chamber (82) as **a supply source of cooling water** (See fig. 3).

22. It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the invention of **Binley ('722)** by providing cooling means associated with the hollow chamber of the ram as taught by **Barger et al. ('731)** because such configuration enable to exhibit the ram with desired applications, such as pressure and cooling application, in order to solidify and to mold the material in excellent appearance and quality.

23. **Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson (US 3,642,415) in view of Yaita et al. (US 4,758,394).**

24. **Johnson ('415)** discloses a **plunger diaphragm device** comprises a **mold (13)**; a reciprocable press headplate operated by ram or plunger rod (12), wherein plate (11) is secured a **forming ram (14)** of a size to enter into the container with predetermined clearance on the sides (See col.2 lines 40-47), wherein ram comprises a hollow internal space and a **shell of rigid material (14,21)** surrounding the internal space (See figure 1), wherein the shell (21) is provided with a **passage** which communicate with the internal space with the mold when the ram (14) is located in the mold (See figures 1-3), wherein **the passage is covered by a diaphragm (20)** (See figure 1). It further teaches that the ram (14) is selectively moveable into positions such as into and out of the mold (See figures 1-3). However, instant disclosure fails to teach or suggest first and second positions of the water cooled ram for making outer shell, therefore, for the examination purpose examiner considering the open and closed positions of the mold as first and second position of the ram as cited in claim. It further teaches that the apparatus comprises a **fluid conduit (23) in communication with the internal space of the ram**, wherein the fluid conduit is involved to supply pressure fluid (See figure 1; col.2 lines 64-67), thus such statement suggests that the source of fluid under pressure communicates with the internal space of ram for expanding the diaphragm into the mold. It further teaches that the invention is capable to control the temperature of the material and article while being formed and for this purpose various heating and cooling means

may be desirable for the apparatus and fluids used (See col.5 lines 45-47), but fails to teach or suggest that the supply source supplying cooling water as fluid under pressure.

25. **Yaita et al. ('394)** discloses an invention which comprises male shaping member having an internal space (35a, 35b) is filled with **cooling water** (See figure 5).

26. It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify internal space of the plunger of **Johnson ('415)** by communicating with cooling water rather than cooling air as taught by **Yaita et al.** because such configuration is capable to inflate the diaphragm of primary art in desire pattern quickly, in order to compress-decompress the molded material within the mold, and thus able to manufacture the product in desired feature and configuration such as smoothness surface of the finished article and contributes to its appearance and marketability.

Response to Arguments

27. Applicant argues that **Foster (US 3,692,456)** refers to an apparatus for converting molding thermoplastic in cup-like articles, wherein invention comprises a male die (63) is lowered in the cavity and a molding glob in the female die is flattened across the mold bottom, the plastic is forced upwardly through the thin sight wall of the cavity (65), completely filling the thicker bead area (71) and forces the volume excess outwardly between the surfaces (66,67), all while the plastic is still molten and then hold the die closed for an interval long enough to insure complete solidification of the plastic before opening of the mold. Applicant argues that after opening the mold the ejector head (83) is moved downwardly relative to the die, in order to strip off the cup from the die, and, therefore, the ram (85) together with the ejector head (83) is only an ejector and has nothing to do with the displacement ram of the present invention as claim.

28. Applicant argues that **Yaita et al. (US 4,758,394)** discloses heating and cooling means (36) comprises a first space (36a) in the female member (30) along the vicinity of the forming portion thereof, a second space (36b) in the male member (31) along the

vicinity of the forming portion thereof, and a stream/cooling water supply means for selectively supplying steam or cooling water to the spaces (36a,36b) through a pipe (36c) from the outside of the pressure chamber (1). Applicant argues that the gas is not supplied to the cavity and the gas does not force the mold material in the cavity.

29. For combination rejection of claim over **Foster (US 3,692,456) and Oliver et al. (US 1,637,532)**, wherein Applicant argues that Oliver et al. ('532) is drawn to a mold whereby containers may be formed from wood pulp or other suitable material. Applicant argues that invention of Oliver et al. ('532) comprises first negative pressure is applied through opening (12) into the chamber (13), which draws the flexible diaphragm (11) against the interior walls of the portion (1). Applicant argues that thereafter a predetermined quantity of suitable material is admitted through the filling chamber (2) into the expanded flexible diaphragm (12). The piston (3) is then pushed by some suitable means down filling chamber (2) to a predetermined point. Thereafter the negative pressure is discontinued through opening (12) and positive pressure is admitted through that opening into the chamber (13). The positive pressure causes the flexible diaphragm (11) to further squeeze the pulp toward the screen (10), dewatering the pulp. Applicant argues that this has nothing to do with the subject matter of claim 27 and does not cure the deficiencies noted above with regards Foster ('456).

30. For combination rejection of claim over **Uichi et al. (JP 05-168452) and Yaita et al. (US 4,758,394)**, wherein Applicant argues that Uichi et al. ('452) is drawn to a mold filled with a chocolate mass. Applicant argues that Uichi et al. ('452) fails to show a temperature-controlled ram which is lowered into the container/mold. Applicant argues that Uichi et al. ('42) discloses a cylindrical object (5a) is arranged above the container, in which product molding part is inserted, wherein the object (5a) is lowered in direction of the container, but is not lowered into the chocolate mass. Applicant argues that only the flexible part of the elastic die (10) is partly lowered into the mass but only in order to touch the chocolate mass. The mixture of chocolate mass is made to adhere to the surface

of the product molding part (1) in the shape of a thin film. Thereafter the flexible part of the die is sucked in the object and then filled with a new material. Applicant argues that this reference has absolutely nothing to do with the present invention as claimed.

31. Applicant's all arguments are moot in view of new grounds of rejections as discussed above.

Conclusion

32. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DIMPLE N. BODAWALA whose telephone number is (571)272-6455. The examiner can normally be reached on Monday - Friday at 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, PHILLIP C. TUCKER can be reached on (571) 272-1095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. N. B./
Examiner, Art Unit 1791

/Philip C Tucker/
Supervisory Patent Examiner, Art Unit 1791